

SECTION 2. FORMS PTO/SB/08A and 08B (formerly Form PTO-1449)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Lang, et al.

Attorney Docket: 2960/112

Serial No: 10/681,749

Art Group Unit: 3733

Date Filed: October 7, 2003

Examiner Name: Philogene, P.

Invention: Minimally Invasive Joint Implant with 3-Dimensional Geometry Matching
The Articular Surfaces



**LIST OF PATENTS AND PUBLICATIONS FOR
APPLICANT'S SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

U.S. PATENT DOCUMENTS					
Examiner Initials	Reference Number	Document Number	Issue Date	Inventor	Class/Subclass
PP	FV	US 4,655,227	April, 1987	Gracovetsky, S.	128/781
	FW	US 4,699,156	October, 1987	Gracovetsky, S.	128/781
	FX	US 4,813,436	March, 1989	Au, J.	128/779
	FY	US 4,823,807	April, 1989	Russell, et al.	128/773
	FZ	US 5,099,859	March, 1992	Bell, G.	128/781
	GA	US 5,129,908	July, 1992	Petersen, T.	606/88
	GB	US 5,154,178	October, 1992	Shah, A.	128/653.2
	GC	US 5,246,013	September, 1993	Frank, et al.	128/774
	GD	US 5,320,102	June, 1994	Paul, et al.	128/653.2
	GE	US 5,413,116	May, 1995	Radke, et al.	128/777
	GF	US 5,433,215	July, 1995	Athanasίου, et al.	128/774
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	GH	US 5,501,687	March, 1996	Willert, et al.	606/94
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	GK	US 5,564,437	October, 1996	Bainville, et al.	128/774
	GL	US 5,682,886	November, 1997	Delp, et al.	128/653.1
	GM	US 5,749,362	May, 1998	Funda, et al.	128/653.1
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	GO	US 5,772,595	June, 1998	Votruba, et al.	600/415
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	GQ	US 5,810,006	September, 1998	Votruba, et al.	128/653.2
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	GU	US 5,885,296	March, 1999	Masini	606/86
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	HL	US 6,187,010	February, 2001	Masini	606/86
	HM	US 6,205,411	March, 2001	DiGioia III, et al.	703/11
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	HW	US 6,560,476	May, 2003	Pelletier, et al.	600/410
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PP	IB	US 2001/0001120	May, 2001	Masini	606/86
	IC	US 2002/0147392	October, 2002	Steines, et al.	600/407
	ID	US 2002/0016543	February 7, 2002	Tyler	600/410
	IE	US 2002/0127264	Sept. 12, 2002	Felt, et al.	424/423
	IF	US 2002/0147392	October 10, 2002	Steines, et al.	600/407
	IG	US 2002/0173852	Nov. 21, 2002	Felt, et al.	623/20.32
	IH	US 2002/0177770	Nov. 28, 2002	Lang, et al.	600/410
	II	US 2003/0015208	January 23, 2003	Lang, et al.	128/922
	IJ	US 2003/0158606	August 21, 2003	Coon, et al.	623/20.15
	IK	US 2003/0225457	Dec. 4, 2003	Justin, et al.	623 20.14
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	IN	US 2004/0153162	August 5, 2004	Sanford, et al.	623/20.3
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	IP	US 2004/0167390	August 26, 2004	Alexander, et al.	600/410
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	IR	US 2004/0193280	Sept. 30, 2004	Webster, et al.	623/20.33
	IS	US 2005/0015153	January 20, 2005	Goble, et al.	623/23.46
	IT	US 2005/0107883	May 19, 2005	Goodfried, et al.	623/20.15
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	IV	US 2005/0171612	August 4, 2005	Rolston	623/20.19

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PP	IX	WO	00/35346	June 22, 2000	Moran, T.	A61B 511
PP	IY	WO	01/10356	February, 2001	Ticulate Holdings, Ltd.	A61F 2/46

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PP	IZ	WO	02/22013	March, 2002	Leland Stanford Junior University	A61B 5/055
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PP	JC	ADAM, G., et al.	"MR Imaging of the Knee: Three-Dimensional Volume Imaging Combined with Fast Processing", J. Comput. Asst. Tomogr; : 984-988 (Nov.-Dec. 1989)
PP	JD	ADAMS, ME, et al.	"Quantitative Imaging of Osteoarthritis", Semin Arthritis Rheum June; 20(6) Suppl. 2: 26-39 (1991)
PP	JE	AHMAD, CS, et al.	"Biomechanical and Topographic Considerations for Autologous Osteochondral Grafting in the Knee", Am J Sports Med Mar-Apr.; 29(2): 201-206 (2001)
PP	JF	ALEXANDER, E.J., et al.	"Internal To External Correspondence In The Analysis Of Lower Limb Bone Motion", Proceedings of the 1999 ASME Summer Bioengineering Conference, Big Sky, Montana (1999)
PP	JG	ALEXANDER, E.J., et al.	"Correcting for Deformation In Skin-Based Marker Systems", Proceedings of the 3 rd Annual Gait and Clinical Movement Analysis Meeting, San Diego, CA (1998)
PP	JH	ALEXANDER, E.J.,	"Estimating The Motion Of Bones From Markers Of Bones From Markers On The Skin (Doctoral Dissertation)", U. of Illinois at Chicago (1998)
PP	JI	ALEXANDER, E.J., et al.	"State Estimation Theory In Human Movement Analysis", Proceedings of the 1998 ASME International Mechanical Engineering Congress (1998)
PP	JJ	ALEXANDER, et al.	"Dynamic Functional Imaging Of The Musculoskeletal System", ASME Winter International Congress and Exposition, Nashville, TN (1999)
PP	JK	ALEXANDER, et al.	"Optimization Techniques For Skin Deformation Correction", International Symposium on 3-D H Human Movement Conference, Chattanooga, TN, (1998)
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PP	JM	ALLEY, et al.	"Ultrafast Contrast-Enhanced Three Dimensional MR Aangiography: State Of The Art." <i>Radiographics</i> 18: 273-285 (1998)
PP	JN	ANDRIACCHI, et al.	"Gait Analysis As A Tool To Assess Joint Kinetics Biomechanics Of Normal And Pathological Human Articulating Joints", <i>Nijhoff, Series E</i> 93:83-102 (1985)
PP	JO	ANDRIACCHI, et al.	"In Vivo Measurement Of Six-Degrees-Of-Freedom Knee Movement During Functional Testing", <i>Transactions of the Orthopedic Research Society</i> : pp. 698 (1995)
PP	JP	ANDRIACCHI, et al.	"A Point Cluster Method For In Vivo Motion Analysis: Applied To A Study Of Knee Kinematics", <i>J. Biomech Eng.</i> 120(12):743-749 (1998)
PP	JQ	ANDRIACCHI, et al.	"Methods For Evaluating The Progression Of Osterarthritis", <i>Journal of Rehabilitation Research and Development</i> 37(2): 163-170 (2000)
PP	JR	ANDRIACCHI, T.P.	"Dynamics of Knee Malalignnment", <i>Orthop Clin North Am</i> 25: 395-403 (1994)
PP	JS	ARO HT, et al.	"Clinical Use of Bone Allografts", <i>Ann Med</i> 25: 403-412, (1993)
PP	JT	BASHIR, et al.	"Validation of Gadolinium Enhanced MRI of GAG Measurement in Human Cartilage"
PP	JU	BEAULIEU, et al.,	"Dynamic Imaging Of Glenohumeral Instability With Open MRI" <i>Int. Society For Magnetic Resonance In Medicine</i> , Sydney, AU (1998)
PP	JV	BEAULIEU, et al.	"Glenohumeral Relationships During Physiological Shoulder Motion And Stress Testing: Initial Experience With Open MRI And Active Scan-25 Plane Registration" <i>Radiology</i> (accepted for publication) (1999)
PP	JW	BECKMANN, et al.	"Noninvasive 3D MR Microscopy as Tool in Pharmacological Research: Application to a Model of Rheumatoid Arthritis", <i>Magn Reson Imaging</i> 13 (7): 10-13-1017 (1995)
PP	JX	BOBIC, V.	"Arthroscopic Osteochondral Autograft Transplantation In Anterior Cruciate Ligament Reconstruction: A Preliminary Clinical Study", <i>Knee Surg. Sports Traumatol Arthrosc</i> 3(4): 262-264 (1996)
PP	JY	BOE, S., et al.	"Arthroscopic Partial Meniscectomy In Patients Aged Over 50", <i>J. Bone Joint Surg.</i> 68B: 70-7 (1986)
PP	JZ	BORTHAKUR, et al.	"In Vivo Triple Quantum Filtered Sodium MRI of Human Articular Cartilage", <i>Seventh Scientific Meeting of ISMRM</i> , p. 549 (1999)
PP	KA	BREGLER, et al.	"Recovering Non-Rigid 3D Shape From Image Streams", <i>ProcIEEE Conference on Computer Vision and Pattern Recognition</i> (2000) in press
PP	KB	BRET, et al.	"Quantitative Analysis Of Biomedical Images", <i>U. of Manchester, Zeneca Pharmaceuticals, IBM UK</i> , http://www.wiau.man.ac.uk/~ads/imv
PP	KC	BRITTBERG, et al.	"A Critical Analysis Of Cartilage Repair", <i>Acta Orthop Scand</i> 68 (2): 186-191 (1997)

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PP	KE	BRODERICK, et al.	"Severity Of Articular Cartilage Abnormality In Patients With Osteoarthritis: Evaluation With Fast Spin-Echo MR Vs Arthroscopy", AJR 162: 99-103 (1994)
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PP	KI	CARANO, et al.	"Estimation Of Erosive Changes In Rheumatoid Arthritis By Temporal Multispectral Analysis", Seventh Scientific Meeting of ISMRM, p. 408, (1999)
PP	KJ	CASTRIOTA-SCANDERBEG, A., et al.	"Precision of Sonographic Measurement of Articular Cartilage: Inter-and Intraobserver Analysis", Skeletal Radiol, 25: 545-549 (1996)
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PP	KM	COHEN, et al.	"Knee Cartilage Topography, Thickness, And Contact Areas From Mri: In-Vitro Calibration And In-Vivo Measurements", Osteoarthritis and Cartilage 7:95-109 (1999)
PP	KN	CREAMER, P., et al.	"Quantitative Magnetic Resonance Imaging of the Knee: A Method of Measuring Response to Intra-Articular Treatments", Ann Rheum Dis., 56: 378-381 (1997)
PP	KO	DANIEL, et al.	"Breast Cancer-Gadolinium-Enhanced MR Imaging With A 0.5T Open Imager And Three-Point Dixon Technique", Radiology 207(1): 183-190 (1998)
PP	KP	DARDZINSKI, et al.	"Entropy Mapping of Articular Cartilage", ISMRM Seventh Scientific Meeting, Philadelphia, PA (1999)
PP	KQ	DARDZINSKI, et al.	"T1-T2 Comparison in Adult Articular Cartilage", ISMRM Seventh Scientific Meeting, Philadelphia, PA (May 22-28, 1999)
PP	KR	DISLER, et al.	"Detection Of Knee Hyaline Cartilage Defects Using Fat-Suppressed Three-Dimensional Spoiled Gradient-Echo MR Imaging: Comparison With Standard MR Imaging And Correlation With Arthroscopy", AJR 165: 377-382 (1995)
PP	KS	DISLER, et al.	"Fat-Suppressed Three-Dimensional Spoiled Gradient-Echo MR Imaging Of Hyaline Cartilage Defects In The Knee: Comparison With Standard MR Imaging And Arthroscopy", AJR 167: 127-132 (1996)

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PP	LC	ECKSTEIN, et al.	"Effect Of Gradient And Section Orientation On Quantitative Analyses Of Knee Joint Cartilage", Journal of Magnetic Resonance Imaging 11: 161-167 (2000)
PP	LD	ECKSTEIN, et al.	"Effect Of Physical Exercise On Cartilage Volume And Thickness In Vivo: An MR Imaging Study", Radiology 207: 243-248 (1998)
PP	LE	EKSTEIN, et al.	"Functional Analysis Of Articular Cartilage Deformation, Recovery, And Fluid Flow Following Dynamic Exercise In Vivo", Anatomy and Embryology 200: 419-424 (1999)
PP	LF	ECKSTEIN, et al.	"In Vivo Reproducibility Of Three-Dimensional Cartilage Volume And Thickness Measurements With Mr Imaging". AJR 170(3): 593-597 (1998)
PP	LG	ECKSTEIN, et al.	"New Quantitative Approaches With 3-D MRI: Cartilage Morphology, Function And Degeneration", Medical Imaging International (Nov.-Dec. 1998)
PP	LH	ECKSTEIN, et al.	"Side Differences Of Knee Joint Cartilage Volume, Thickness, And Surface Area, And Correlation With Lower Limb Dominance - An MRI-Based Study", Osteoarthritis and Cartilage 10: 914-921 (2002)
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PP	LK	ECKSTEIN, et al.	"The Influence of Geometry on the Stress Distribution in Joints - A Finite Element Analysis", Anat Embryol, 189: 545-552 (1994)
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PP	LN	FABER, et al.	"Gender Differences In Knee Joint Cartilage Thickness, Volume And Articular Surface Areas: Assessment With Quantitative Three-Dimensional MR Imaging", Skeletal radiology 30 (3): 144-150 (2001)
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PP	LS	GARRETT, J.C.	"Osteochondral Allografts For Reconstruction Of Articular Defects Of The Knee", Instr Course Lect 47:51-522 (1998)
PP	LT	GERSCOVICH, E.O.	"A Radiologist's Guide To The Imaging In The Diagnosis And Treatment Of Developmental Dysplasia Of The Hip" Skeletal Radiol, 26: 447-456 (1997)
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PP	LV	GLASER, et al.	"Optimization And Validation Of A Rapid Highresolution T1-W 3-D Flash Waterexcitation MR Sequence For The Quantitative Assessment Of Articular Cartilage Volume And Thickness" Magnetic Resonance Imaging, 19: 177-185 (2001)
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PP	LY	GRAICHEN, et al.	"Three-Dimensional Analysis Of The Width Of The Subacromial Space In Healthy Subjects And Patients With Impingement Syndrome", American Journal of Roentgenology 172: 1081-1086 (1999)

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PP	MA	HARDY, et al.	"Measuring the Thickness of Articular Cartilage from MR Images", J. Magnetic Resonance Imaging 13: 120-126 (2001)
PP	MB	HARDY, et al.	"The Influence Of The Resolution And Contrast On Measuring The Articular Cartilage Volume In Magnetic Resonance Images" Magn Reson Imaging, 18(8): 965-972 (Oct., 2000)
PP	MC	HARGREAVES, et al.	"Imaging Of Articular Cartilage Using Driven Equilibrium" Int'l. Society for Magnetic Resonance in Medicine, Sydney, AU, pp. 17-24 (Apr., 1998)
PP	MD	HARGREAVES, et al.	"MR Imaging of Articular Cartilage Using Driven Equilibrium", Magnetic Resonance in Medicine 42(4): v695-703 (Oct., 1999)
PP	ME	HARGREAVES, et al.	"Technical Considerations For DEFT Imaging", International Society for Magnetic Resonance in Medicine, Sydney, AU, pp. 17-24 (Apr., 1998)
PP	MF	HAUBNER, M., et al.	"A Non-Invasive Technique For 3-Dimensional Assessment Of Articular Cartilage Thickness Based On MRI Part @: Validation Using CT Arthrography", Magn Reson Imaging 15(7): 805-813 (1997)
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Examiner Signature: /Pedro Philogene/

Date Considered: 01/02/2007

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